The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A method for growing a doped glass layer [[~~film~~]] on ~~a~~ surface of a substrate comprising the step of:

reacting a [[~~dopant~~]] precursor compound of the formula $(R_3SiO)_jM(OR')_k$ to deposit a doped glass layer [[~~film~~]] on the surface of the substrate;

wherein M is Ti or Zr; R_3 is an alkyl moiety; R′ is an alkyl moiety; j is 1, 2, 3 or 4; and k=~~4-~~j, and

wherein said doped glass layer on the substrate has a Si:M ratio of 1:1, 2:1, 3:1 or 4:1 depending on the value of j.

2. (original) The method of claim 1, wherein R is selected from the group consisting of methyl, ethyl and propyl; and R′ is selected from the group consisting of methyl, ethyl, *n*-propyl, isopropyl, *n*-butyl, isobutyl, *t*-butyl and *s*-butyl.

3. (cancelled)

4. (currently amended) The method of claim 1 [[~~3~~]], wherein the doped glass layer is deposited ~~reacting step is performed~~ using a CVD process.

5. (currently amended) The method of claim 1 [[~~3~~]], wherein the CVD process is an inside vapor deposition process or an outside vapor deposition process.

6. (currently amended) The method of claim 1 [[~~5~~]] wherein the reacting step is performed using a PECVD process.

7. - 8 (cancelled)

9. (currently amended) The method of claim 1 [[~~8~~]], wherein the doped glass layer is deposited ~~reacting step is performed~~ using a flame hydrolysis deposition process.

10. (currently amended) The method of claim 9 wherein the doped glass layer is deposited as ~~film deposited in the reacting step is~~ a layer of doped glass soot particles, and wherein the method further comprises the step of consolidating the soot particles to a homogeneous doped glass film by heat treatment.

11. (currently amended) The method of claim 1 wherein the precursor compound of the formula $(R_3SiO)_iM(OR')_k$ is mixed with a silica precursor before deposition of the doped glass layer; and when said silica precursor is admixed with the precursor $(R_3SiO)_iM(OR')_k$, the resulting glass product has a non-stochiometric Si:M ratio relative to i, including a value greater than i. ~~is reacted with the dopant precursor.~~

12. (currently amended) The method of claim 11, wherein the silica precursor ~~forming substance~~ is selected from the group consisting of tetraethoxysilane, silane, disilane, tetramethylsilane, trimethylsilane, dimethylsilane, methylsilane, tetraaminosilane, triaminosilane, diaminosilane, aminosilane, tetrakis(diethylamino)silane, octamethylcyclotetrasiloxane, tetramethylcyclotetrasiloxane and diacetoxydi-*s*-butoxysilane.

13. (original) The method of claim 1, wherein the organometallic compound is chosen from the group consisting of tetrakis(trimethylsiloxy)titanium, tetrakis(trimethylsiloxy)zirconium, tris(trimethylsiloxy)isopropoxytitanium, tris(trimethylsiloxy)isopropoxyzirconium, bis(trimethylsiloxy)diisopropoxytitanium, bis(trimethylsiloxy)diisopropoxyzirconium, (trimethylsiloxy)triisopropoxytitanium, and (trimethylsiloxy)triisopropoxyzirconium.

14-21. (previously cancelled)

22. – 25 (cancelled)

26. (currently amended) A method of making a planar waveguide comprising the steps of:

using a ~~reacting a dopant~~ precursor compound of the formula $(R_3SiO)_jM(OR')_k$ to deposit a doped glass layer [[~~film~~]] on the surface of a substrate, wherein M is Ti or Zr; R is an alkyl moiety; R′ is an alkyl moiety; j is 1, 2, 3 or 4; and k=4-j; and

using photolithographic techniques to form the planar waveguide from the doped glass layer [[~~film~~]].

27. (currently amended) A method of making an optical fiber comprising the steps of:

making an optical fiber preform by using a ~~reacting a dopant~~ precursor compound of the formula $(R_3SiO)_jM(OR')_k$ to deposit a doped glass layer [[~~film~~]] on the surface of a substrate, wherein M is Ti or Zr; R is an alkyl moiety; R′ is an alkyl moiety; j is 1, 2, 3 or 4; and k=4-j; and

drawing the optical fiber preform into an optical fiber.